W?

- 4. (Amended) The piezoelectric transformer according to claim 10, wherein the common electrode is integrally formed on at least a part of the second face of the piezoelectric block.
- 5. (Amended) The piezoelectric transformer according to claim 10, wherein the common electrode is formed on the second face of the piezoelectric block in a plurality of isolations to prevent the input of the noise.
- 6. (Amended) The piezoelectric transformer according to claim 10, wherein the common electrode is facing the input and output electrodes.

Please add new claims 10-18 as follows:

--10. A piezoelectric transformer comprising:

(Jb)

a piezoelectric block having first and second faces to convert an electrical signal into mechanical vibration by an outline vibration mode;

an input electrode having a substantially diamond shape and disposed closer to a central region of each side than to a corner region on the first face of the piezoelectric block, the electric signal being inputted to the input electrode;

an output electrode separated from the input electrode by a predetermined constant distance at a peripheral region on the first face so that its size at the central region of each side is smaller than its size at the corner region, the output electrode converting the mechanical vibration into an electrical signal and outputting the converted electric signal; and

a common electrode on the second face of the piezoelectric block;

wherein the length ratio of a side of the input electrode to a side of the output electrode is in the range of 1:15-1:3.14.

11. A piezoelectric transformer comprising:

a piezoelectric block having first and second faces to convert an electrical signal into mechanical vibration by an outline vibration mode;

an input electrode having a substantially cross shape and disposed closer to a

a3

central region of each side than to a corner region on the first face of the piezoelectric block, the electrical signal being inputted to the input electrode;

an output electrode separated from the input electrode by a predetermined constant distance at a peripheral region on the first face so that its size at the central region of each side is smaller than its size at the corner region, the output electrode converting the mechanical vibration into an electrical signal and outputting the converted electric signal; and a common electrode on the second face of the piezoelectric block.

12. A piezoelectric transformer comprising:

a piezoelectric block having first and second faces to convert an electrical signal into mechanical vibration by an outline vibration mode;

an input electrode having a substantially rhombic shape and disposed closer to a central region of each side than to a corner region on the first face of the piezoelectric block, the electrical signal being inputted to the input electrode;

an output electrode separated from the input electrode by a predetermined constant distance at a peripheral region on the first face so that its size at the central region of each side is smaller than its size at the corner region, the output electrode converting the mechanical vibration into an electrical signal and outputting the converted electric signal; and a common electrode on the second face of the piezoelectric block.

- 13. The piezoelectric transformer according to claim 11, wherein the common electrode is integrally formed on at least a part of the second face of the piezoelectric block.
- 14. The piezoelectric transformer according to claim 11, wherein the common electrode is formed on the second face of the piezoelectric block in a plurality of isolations to prevent the input of the noise.
- 15. The piezoelectric transformer according to claim 11, wherein the common electrode is facing the input and output electrodes.

azid.

16. The piezoelectric transformer according to claim 12, wherein the common electrode is integrally formed on at least a part of the second face of the piezoelectric block.

- 17. The piezoelectric transformer according to claim 12, wherein the common electrode is formed on the second face of the piezoelectric block in a plurality of isolations to prevent the input of the noise.
- 18. The piezoelectric transformer according to claim 12, wherein the common electrode is facing the input and output electrodes.--

REMARKS

By this Amendment, the entire application has been revised to correct minor informalities and to improve the clarity thereof. In addition, claims 1-3 and 7-9 have been canceled without prejudice or disclaimer of their subject matter and the remaining claims amended and new claims 10-18 added. It is submitted that the entire application meets all of the statutory requirements of 35 USC 112 as to form.

Claims 1-2 and 5-9 have been rejected under 35 USC 102 as anticipated by Danov for the reasons stated in section 2 bridging pages 2 and 3 of the Office Action. Furthermore, claims 3 and 4 have been rejected under 35 USC 103 as obvious over Danov in view of "common knowledge in the art" for the reasons stated in sections 4-6 on pages 3 and 4 of the Office Action. As noted above, claims 1-3 and 7-9 have been canceled and the remaining claims amended and new claims 10-18 added. It is submitted that claims 4-6 and 10-18 define over Danov for the following reasons:

New claim 10 corresponds to the combination of canceled claims 1-3 and 7. New claim 11 corresponds to claim 8 rewritten in independent form. New claim 12 is similar to new claim 11 but recites the rhombic shaped input electrode disclosed in the specification but not previously claimed. Lastly, new claims 13-18 correspond to claims 4-6 with their dependency changed so as to be dependent upon new claims 11 and 12.

The claimed piezoelectric transformer of the present invention comprises a diamond or cross-shaped or rhombic input electrode and an output electrode separated from the input